

**Appendix 1:** Selection of representative SEER study for each outcome, highlighted in bold.  
[posted as supplied by author]

**Comparison: Any radiation vs no radiation**

|                    | Any lag  | 5 year lag  | 10 year                         | Hazard ratio                                 |
|--------------------|--|---|---------------------------------|--|
| Bladder cancer     | Abdel-Wahab 2008<br>Abern 2013<br>Anderson 2013<br>Berrington 2011<br>Brenner 2000<br>Chrouser 2008<br><b>Davis 2014</b><br>Huang 2011<br>Moon 2006<br>Movsas 1998<br>Neugut 1997<br>Nieder 2008<br>Pawlish 1997<br>Singh 2010 | Berrington 2011<br>Moon 2006<br>Pawlish 1997<br><b>Singh 2010</b> | <b>Davis 2014</b><br>Singh 2010 | Abern 2013<br>Singh 2010<br>Huang 2011       |
| Colorectal cancer  | Abdel-Wahab 2008<br>Berrington 2011<br>Baxter 2005<br>Brenner 2000<br><b>Davis 2014</b><br>Huang 2011<br>Huo 2009<br>Kendal 2006<br>Moon 2006<br>Movsas 1998<br>Nieder 2008  | <b>Berrington 2011</b><br>Baxter 2005<br>Moon 2006                | <b>Davis 2014</b>               | Baxter 2005<br>Huang 2011<br><b>Huo 2009</b> |
| Rectal cancer      | Abdel-Wahab 2008<br>Berrington 2011<br>Baxter 2005<br>Brenner 2000<br><b>Davis 2014</b><br>Huang 2011<br>Huo 2009<br>Kendal 2006<br>Moon 2006<br>Movsas 1998<br>Neugut 1997<br>Nieder 2008                                     | <b>Berrington 2011</b><br>Baxter 2005<br>Moon 2006                | <b>Davis 2014</b>               | Baxter 2005<br>Huang 2011<br><b>Huo 2009</b> |
| Lung cancer        | Abdel-Wahab 2008<br>Berrington 2011<br><b>Davis 2014</b><br>Huang 2011<br>Moon 2006<br>Movsas 1998   | <b>Berrington 2011</b><br>Moon 2006                               | <b>Davis 2014</b>               | <b>Huang 2011</b>                            |
| Hematologic cancer | Abdel-Wahab 2008<br>Brenner 2000<br><b>Davis 2014</b><br>Huang 2011<br>Moon 2006<br>Movsas 1998<br>Neugut 1997   | <b>Moon 2006</b>  | <b>Davis 2014</b>               | <b>Huang 2011</b>                            |

**Comparison: Any radiation vs surgery**

|                    | Any lag  | 5 year lag         | Hazard ratio                     |
|--------------------|--|--------------------|----------------------------------|
| Bladder cancer     | <b>Abern 2013</b><br>Brenner 2000<br>Huang 2011<br>Nieder 2008                 |                    | <b>Abern 2013</b><br>Huang 2011  |
| Colorectal cancer  | Baxter 2005<br>Brenner 2000<br>Huang 2011<br>Kendal 2006<br><b>Nieder 2008</b> | <b>Baxter 2005</b> | <b>Baxter 2005</b><br>Huang 2011 |
| Rectal cancer      | Baxter 2005<br>Brenner 2000<br>Huang 2011<br>Kendal 2006<br><b>Nieder 2008</b> | <b>Baxter 2005</b> | <b>Baxter 2005</b><br>Huang 2011 |
| Lung cancer        | <b>Brenner 2000</b><br>Huang 2011  |                    | <b>Huang 2011</b>                |
| Hematologic cancer | <b>Brenner 2000</b><br>Huang 2011<br>Neugut 1997                               |                    | <b>Huang 2011</b>                |

**Comparison: EBRT vs no radiation**

|                    | Any lag   | 5 year lag                                     | 10 year                         | Hazard ratio                                  |
|--------------------|---|--|---------------------------------|---|
| Bladder cancer     | Abdel-Wahab 2008<br>Abern 2013<br>Anderson 2013<br>Brenner 2000<br>Chrouser 2008<br><b>Davis 2014</b><br>Huang 2011<br>Moon 2006<br>Movsas 1998<br>Neugut 1997<br>Nieder 2008<br>Pawlish 1997<br>Singh 2010 | Moon 2006<br>Pawlish 1997<br><b>Singh 2010</b> | <b>Davis 2014</b><br>Singh 2010 | Abern 2013<br><b>Singh 2010</b><br>Huang 2011 |
| Colorectal cancer  | Abdel-Wahab 2008<br>Baxter 2005<br>Brenner 2000<br><b>Davis 2014</b><br>Huang 2011<br>Huo 2009<br>Kendal 2006<br>Moon 2006<br>Movsas 1998   | Baxter 2005<br><b>Moon 2006</b>                | <b>Davis 2014</b>               | <b>Baxter 2005</b><br>Huang 2011              |
| Rectal cancer      | Abdel-Wahab 2008<br>Baxter 2005<br>Brenner 2000<br><b>Davis 2014</b><br>Huang 2011<br>Kendal 2006<br>Moon 2006<br>Movsas 1998<br>Neugut 1997<br>Nieder 2008   | Baxter 2005<br><b>Moon 2006</b>                | <b>Davis 2014</b>               | <b>Baxter 2005</b><br>Huang 2011              |
| Lung cancer        | Abdel-Wahab 2008<br>Brenner 2000<br><b>Davis 2014</b><br>Huang 2011<br>Moon 2006<br>Movsas 1998   | <b>Moon 2006</b>                               | <b>Davis 2014</b>               | <b>Huang 2011</b>                             |
| Hematologic cancer | Abdel-Wahab 2008<br>Brenner 2000<br><b>Davis 2014</b><br>Huang 2011<br>Moon 2006<br>Movsas 1998<br>Neugut 1997  | <b>Moon 2006</b>                               | <b>Davis 2014</b>               | <b>Huang 2011</b>                             |

#### Comparison: EBRT vs surgery

|                    | Any lag  | 5 year lag         | Hazard ratio                     |
|--------------------|--|--------------------|----------------------------------|
| Bladder cancer     | <b>Abern 2013</b><br>Brenner 2000<br>Huang 2011<br>Nieder 2008                 |                    | <b>Huang 2011</b>                |
| Colorectal cancer  | Baxter 2005<br>Brenner 2000<br>Huang 2011<br>Kendal 2006<br><b>Nieder 2008</b> | <b>Baxter 2005</b> | <b>Baxter 2005</b><br>Huang 2011 |
| Rectal cancer      | Baxter 2005<br>Brenner 2000<br>Huang 2011<br>Kendal 2006<br><b>Nieder 2008</b> | <b>Baxter 2005</b> | <b>Baxter 2005</b><br>Huang 2011 |
| Lung cancer        | <b>Brenner 2000</b><br>Huang 2011  |                    | <b>Huang 2011</b>                |
| Hematologic cancer | <b>Brenner 2000</b><br>Huang 2011<br>Neugut 1997                               |                    | <b>Huang 2011</b>                |

#### Comparison: Brachytherapy vs no radiation

|                    | Any lag   | 5 year lag       | Hazard ratio                    |
|--------------------|---|------------------|---------------------------------|
| Bladder cancer     | Abdel-Wahab 2008<br><b>Abern 2013</b><br>Moon 2006<br>Nieder 2008 | <b>Moon 2006</b> | <b>Abern 2013</b><br>Huang 2011 |
| Colorectal cancer  | Abdel-Wahab 2008<br>Moon 2006<br><b>Nieder 2008</b>               | <b>Moon 2006</b> |                                 |
| Rectal cancer      | Abdel-Wahab 2008<br>Moon 2006<br><b>Nieder 2008</b>               | <b>Moon 2006</b> |                                 |
| Lung cancer        | <b>Abdel-Wahab 2008</b><br>Moon 2006                              | <b>Moon 2006</b> | <b>Huang 2011</b>               |
| Hematologic cancer | <b>Abdel-Wahab 2008</b><br>Moon 2006<br>Neugut 1997               | <b>Moon 2006</b> | <b>Huang 2011</b>               |

#### Comparison: Brachytherapy vs surgery

|                    | Any lag                          | 5 year lag | Hazard ratio                    |
|--------------------|----------------------------------|------------|---------------------------------|
| Bladder cancer     | <b>Abern 2013</b><br>Nieder 2008 |            | <b>Abern 2013</b><br>Huang 2011 |
| Colorectal cancer  | <b>Nieder 2008</b>               |            |                                 |
| Rectal cancer      | <b>Nieder 2008</b>               |            |                                 |
| Lung cancer        |                                  |            | <b>Huang 2011</b>               |
| Hematologic cancer |                                  |            | <b>Huang 2011</b>               |